

Title (en)

Control system for a door opener actuated by direct-current

Title (de)

Ansteuerung für einen mit Gleichstrom betriebenen Türöffner

Title (fr)

Système de contrôle pour dispositif d'ouverture de porte à courant continu

Publication

**EP 1437463 B2 20160217 (DE)**

Application

**EP 04000312 A 20040109**

Priority

DE 10300828 A 20030110

Abstract (en)

[origin: EP1437463A2] A self-locking N-channel MOSFET (T1) in a source circuit has its source earthed for feeding a current to a door opener (TO) that fits between the MOSFET's drain connection and the door opener's positive voltage supply (UBT). A diode (D3) is coupled parallel to the door opener with its anode on the MOSFET's drain connection and its cathode on the door opener's positive voltage supply. Independent claims are also included for the following: (a) A power supply unit for a door opener operated by direct current; (b) and for a method for triggering a door opener operated by direct current.

IPC 8 full level

**E05B 47/00** (2006.01); **E05B 15/02** (2006.01)

CPC (source: EP)

**E05B 47/00** (2013.01); **E05B 47/0046** (2013.01)

Citation (opposition)

Opponent :

- DE 3741619 A1 19890622 - FESTO KG [DE]
- DE 231025 C
- DE 19856624 A1 20000621 - FUSS FRITZ GMBH & CO [DE]
- DE 10116571 A1 20021017 - IST SYSTEMS GMBH [DE]
- DE 4015466 C1 19910516
- DE 3719298 A1 19881222 - BAYERISCHE MOTOREN WERKE AG [DE]

Cited by

US2022384076A1; EP2602408A3; DE102011121702C5; US11424061B2; US11545289B2; US11915869B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**EP 1437463 A2 20040714**; **EP 1437463 A3 20080319**; **EP 1437463 B1 20100526**; **EP 1437463 B2 20160217**; AT E469281 T1 20100615; DE 10300828 A1 20040729; DE 10300828 B4 20050303; DE 10300828 C5 20090610; DE 502004011193 D1 20100708; ES 2345546 T3 20100927; ES 2345546 T5 20160517; PL 364336 A1 20040712

DOCDB simple family (application)

**EP 04000312 A 20040109**; AT 04000312 T 20040109; DE 10300828 A 20030110; DE 502004011193 T 20040109; ES 04000312 T 20040109; PL 36433604 A 20040108